

GENERAL SCOPE OF WORK AND ADDITIONAL INFORMATION

CONSULTANT TO MANAGE, ADMINISTER AND PROVIDE THE “RTID COST ESTIMATE REVIEW”

General

The Washington State Department of Transportation (WSDOT, Department, Commission) has been tasked by the Legislature to conduct “an external review of Regional Transportation Investment District (RTID) project cost estimates in order to provide the best available estimate of cost maximizing the use of RTID funds while ensuring that projects will not overrun estimates.” (2003-05 Transportation Budget, Program T – Budget \$5 million).

In order to conduct this work, the Department is seeing an experienced Resource Consultant to manage and administer the work and to secure the services of Subject Matter Experts (SMEs) as defined herein, to provide the independent technical evaluations and recommendations required. Close liaison with the Department, representatives of the RTID Executive and other involved parties will be required throughout the work.

Context of the work

This task is intended to inform decision makers, project owners and the public regarding the probable costs for RTID projects. There is substantial public skepticism regarding the reliability of public works cost estimates and the ability of governments to effectively manage them – the results of Referendum 51 and recent polls have confirmed this. Accordingly, the independence and capability of the consultant and the Subject Matter Experts is a strong factor in this RFP.

Substantial public comment on the results is anticipated, depending on the task findings. Therefore, the task scope, plan and approach, deliverables and communication (of results as well as context and justification) need to be well managed and communicated to the Commission, representatives of the RTID Executive Committee, other involved parties and, especially, the public.

The results of cost estimating can be sensitive. It is recognized that the actual cost of a project is subject to many variables, which can significantly influence the range of probable projected cost. Any one cost number represents only one possible result of the multiple variables and assumptions. These variables are not directly controllable nor absolutely quantifiable. This is the environment in which this task and its results need to be managed and communicated.

Audience

- The Legislature / Transportation Committee
- RTID Executive Director, Executive Committee (7), Planning Committee (25)
- WSDOT Commission and Executive (HSS, non-HSS)
- Local Mayors and Councils (Transit, non-HSS)
- The public and their Legislative representatives
- Public interest and business groups (stakeholders)
- Local and Regional Media
- Local and regional Transit Agencies and Port Authorities
- US Administration (FTA, FHWA, other involved agencies)
- State Transportation Agencies including King, Pierce and Snohomish Counties
- WSDOT Program and Functional Management

Reporting Responsibility

The Department is responsible for the execution of this task, liaising closely with The RTID Executive Director, representatives of the RTID Executive Committee and other involved parties. The WSDOT Urban Corridors Office (UCO), has been tasked with the Department's responsibility for this work, assisted by other Departmental staff and consultants.

The Department has requested that John Reilly of John Reilly Associates International, Ltd. (JRAI) assist with overall management, coordination, communication and liaison of the work. John Reilly was one of the initial developers of the Department's Cost Estimate Validation Process (CEVP[®]) and will serve as a link to the specifics of that process, its application and results to date, plus options for improvement and implementation. He is currently assisting the Department with management strategies and cost-risk methodologies.

Other involved resources include the project staff of the RTID projects – WSDOT, Cities and Towns – and the CEVP[®] resources of WSDOT and its consultants.

The selected Consultant will be responsible for management, administration, quality and completeness of the work, provision of technical resources (except for those provided by others) provision of the Subject Matter Experts, presentations and graphics material.

Consultant Selection

The selection process will be managed by the current RTID Executive Director with a selection committee comprised of 3 designated RTID Executive Committee members, one from each country of the RTID Area. These are Rob McKenna (King County), Dave Gossett (Snohomish County) and Shawn Bunney (Pierce County). WSDOT will provide administration for the Consultant Statement of Qualifications (SOQ), evaluation and selection process.

Selection of the Consultant will be based on the selection Committee's determination of the most suitable consultant, based on the selection criteria described in the SOQ request document, including the requirement for satisfactory independence from the development of existing RTID project cost estimates, development of WSDOT's CEVP[®] methodology and other considerations appropriate to the successful completion of this work.

Consultant's independence

The Legislative wording requires that an "external review" of RTID project cost estimates be made. This means that the selected Consultant, who will review the existing cost estimates and the associated methodologies, including WSDOT's CEVP[®] cost-risk methodologies, must be sufficiently independent, of WSDOT and RTID, for an objective evaluation of these cost estimates and the associated methodologies to be made, which will be defensible and sustainable.

Conflicts affecting the independence requirement of this task, due to substantial prior involvement with the cost estimates prepared for the RTID projects and/or the WSDOT CEVP[®] process, as applied to such projects, will be cause for non-consideration of any proposal or consultant group.

Specifically, the selected Consultant and/or the personnel to carry out this work, except as noted, in the scope of work, should not have either 1) worked directly on the RTID project cost estimates or 2) have been a significant developer or proponent of the WSDOT CEVP[®] cost-risk process or 3) should not have been, or currently be, engaged on WSDOT or RTID projects or significantly related contracts, in a manner which would interfere with the Consultant fulfilling its responsibility to provide objective and independent evaluations, findings and recommendations related to this task, as defined herein. It is up to the Consultant to demonstrate such independence and to the Selection Committee to evaluate and determine acceptability.

General Scope of Consultant's Work

A National-Level review of the cost and schedule estimates for RTID projects and the cost-estimating methodologies used to produce them. The methodologies include conventional cost estimating procedures as well as the WSDOT CEVP[®], CRA and SCoRE¹ processes.

An assessment of these cost estimates in terms of the “likelihood that the projects will not overrun the estimates”.

The review will be conducted by the Resource Consultant utilizing Subject Matter Experts (SMEs) – drawn from the Consultant’s staff or external to the Consultant but subcontracted to Consultant – who collectively have significant (National Level) experience in project management, design and construction, cost estimating procedures, risk identification and mitigation techniques for a range of transportation design and construction projects, with an emphasis on highway projects and a working knowledge BRT² and relevant transit-type systems.

Task Elements

Anticipated task elements include:

1. An external review of, and commentary on, the CEVP[®] & SCoRE methodologies used in the initial cost assessment of some RTID projects in 2002 and 2003 also considering recent developments in this methodology – e.g. recent CRA processes, National applications and developments.
2. An external review of the validity of all RTID project cost estimates, including those resulting from CEVP[®] & SCoRE evaluations, done in 2002 and 2003.
3. Recommendations for changes and improvements to cost estimating and management processes to “...ensure that projects will not overrun estimates.”
4. Assistance to, and coordination with, Agencies, Cities and Towns for re-estimates, updates or new estimates for RTID projects as necessary following Consultant’s review of existing estimates. It is anticipated that Consultant will, with WSDOT and RTID approval, need to provide cost estimating services for a significant number of these project, as determined following tasks 1 and 2 above. The provision of these services shall not be done in a manner that compromises the integrity or independence of this cost estimate review.
5. An application of, or management and coordination of, CEVP[®] /SCoRE/CRA evaluations and determinations, as appropriate, to those RTID projects that, due to time and resource problems, were not so evaluated in the initial cost evaluation process and which require an updated estimate utilizing such methodologies.
6. An external review of, and commentary on, WSDOT and other Agency management actions, including planning strategies and early risk management actions to “ensure that projects will not overrun estimates.”
7. Commentary on the regional and local program and project environment in terms of best management practices to “...ensure that projects will not overrun estimates.”
8. Draft and Final Report(s), presentations of findings, conclusions and recommendations.

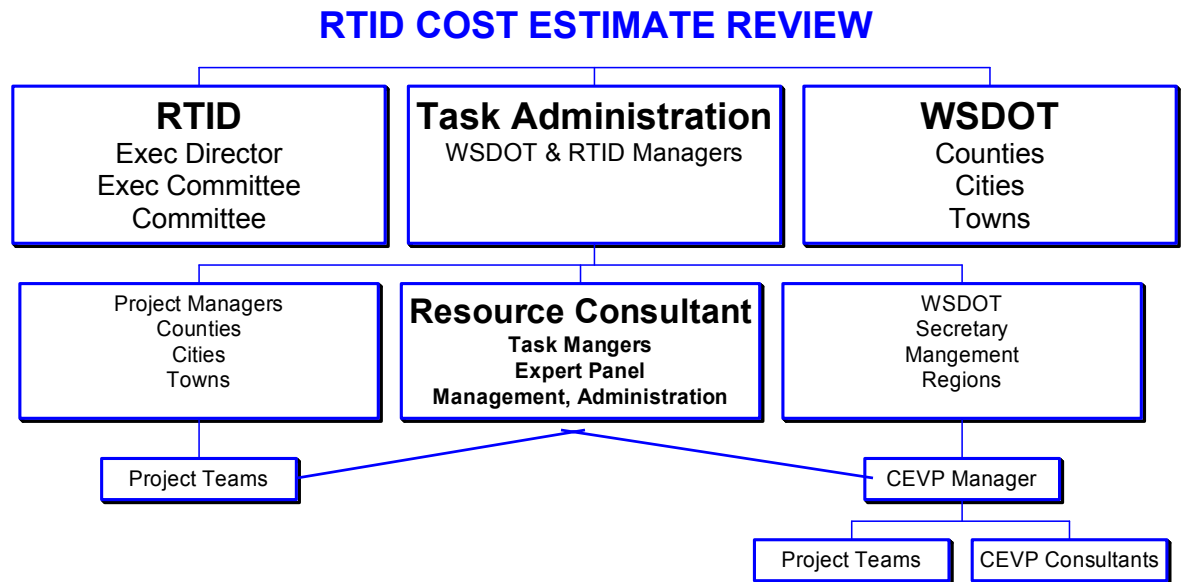
¹ The CEVP[®] Cost Estimate Validation Process was developed by WSDOT in early 2002 to better estimate the range of probable cost for large, complex WSDOT projects. An abbreviated process, SCoRE (Schedule, Cost and Risk Evaluation), was used to assess smaller projects, usually in 1-day worksessions. Subsequently WSDOT calls the generic process CRA (Cost-Risk-Assessment) as applied to most projects - CEVP[®] is used on the larger, more complex WSDOT projects and involves specialized external expertise. CEVP[®] is used in this document to include all cost-risk range estimate processes.

² Bus Rapid Transit systems.

9. Management and Administration of the work including a very senior Project Manager experienced in similar projects and technical elements directly relevant to this task.
10. Identification and provision of suitable Subject Matter Experts, in fields relevant to this task, for approval by WSDOT with the concurrence of the RTID representatives.

Proposed Structure for this Task

The envisioned management structure for this task is shown following in Figure 1.



Task Structure (Figure 1)

Capabilities

It is envisioned that the following persons or entities will be required to ensure objectivity and to produce results which are useful to the Legislature, the Commission, RTID, WSDOT, Counties, Cities and Towns – i.e. those who are responsible to scope and deliver these projects.

A. Consultant Team

1. Resource Consultant

Experienced consultant firm for task management and administration, with relevant expertise in management of complex transportation projects, cost estimating and risk methodologies, with capability for task implementation, provision of other specialty expertise, conducting necessary studies, data gathering, preparation of presentation materials for the Agencies and public and provision of miscellaneous work products.

2. Task managers

National/International-level managers, who understand the management and technical issues involved, are experienced in the applications, are sensitive to the environment in which this work is to be accomplished. Relevant experience in major, complex infrastructure project management, cost estimating procedures and risk / uncertainty processes.

- a. One essentially full-time manager / administrator.
- b. One deputy manager who is experienced in the management of complex transportation projects and cost estimating, who has not worked on these projects and who is new to CEVP® /SCoRE/CRA processes, WSDOT and other involved Agencies.

Note: it is possible that the full-time manager / administrator and the deputy manager noted above could be one person if that person is sufficiently qualified and available.

- c. One deputy manager who is experienced in the management of complex transportation projects and cost estimating, who has applied CEVP® and is familiar with its use (It is anticipated that this deputy manager position will be filled and funded by WSDOT.)

3. National-level Expert Panel of Subject Matter Experts

Subject Matter Experts with knowledge in the following fields related to a range of transportation design and construction projects, with an emphasis on highway projects and a working knowledge of BRT projects and relevant transit-type systems. It is anticipated that the panel will consist of 4 – 6 members, with expertise as defined under “Qualifications” following. Agency, management, design, construction and academic professionals should be considered.

Some subject matter experts may be drawn from the Consultant’s staff if suitably qualified, however a significant number of experts (more than 1/3) must be non-employees of the Consultant.

The SEMs need to provide (collectively):

- 1) External independent/un-biased task management expertise in management of complex infrastructure projects, cost estimating procedures, risk and risk mitigation and the effects of different contractual and project environments.
- 2) A sufficient understanding of CEVP® - and similar National and International cost-risk processes – plus expertise in management of complex infrastructure projects, cost estimating procedures, risk and risk mitigation and the effects of different contractual and project environments.

The SMEs need to cover the following expertise areas:

- a. Public Works management – contracting, design and construction management including strategic management of complex long-term technical programs. An understanding of Public Agency responsibilities such as delivery strategies, accountability, public and political processes, environmental measures, funding requirements and limitations and, public outreach strategies;
- b. Design of complex infrastructure and transportation projects;
- c. Construction of complex infrastructure and transportation projects;
- d. Nationally accepted cost estimating processes, including baseline cost definition and configuration management (control of changes to baseline);
- e. Risk identification, evaluation and mitigation processes related to cost-range estimates; and
- f. Technical design and construction subject areas (e.g. civil, structural and utility design, geotechnical, construction mobilization and operations, market factors, etc.)

B. Other Resources (not part of Consultant's scope):

4. RTID Staff

As necessary to assist with the work, provide input and comments. The RTID Executive, including the Executive Director and representatives of the Executive Committee, will be involved as appropriate.

5. County, City and Towns Staff

Project Managers and Functional Leads for RTID projects – to provide project specific cost and context information, re-estimating costs where necessary, to provide risk identification information and to comment on Task findings. It is anticipated that funding for non-normal project cost estimating will be provided by WSDOT out of the Transportation Budget, Program T (this work).

6. WSDOT Functional and CEVP® Staff, Project staff and Consultants

As necessary to assist with the work, including assistance with application of CEVP® and CRA processes to those RTID projects as determined necessary during the course of this work – such assistance to be funded by WSDOT out of the Transportation Budget, Program T (this work) and to provide input and comments to the findings.

7. WSDOT CEVP® consultants

As necessary to provide historical information on work accomplished, cost and risk methodologies used and related technical input to the panel, such assistance to be funded by WSDOT out of the Transportation Budget, Program T (this work) and to provide input and comments to the findings.

Sequence of Activities – RTID, WSDOT, Consultant and others

The following table outlines the anticipated sequence of work for this task. For the required schedule see the barchart following – a key period is from Notice to Proceed (NTP) to June 30, 2004, - at the end of which period key deliverables must be available to sufficiently inform RTID for decisions and reporting relative to the November 2004 referendum on the RTID projects and their funding. Following this, work is anticipated to continue to December 31, 2004, to complete required deliverables.

Note: These activities will not all be accomplished by the Resource Consultant - but the Resource Consultant must provide appropriate information and support to others if and as necessary to successfully fulfill the objectives of the work.

ACTIVITY

1. Selection of Resource Consultant with Task Managers and National-level Subject Matter Experts subject to finalization of negotiations.
 2. Resource Consultant & SMEs, in negotiations with WSDOT and RTID, develops specific scope, task plan and approach, defines deliverables, lists areas to be examined, defines resources and personnel required, commits to possible schedule.
WSDOT and RTID confirm scope, plan & approach, schedule, budget and procurement are consistent with the intent of the legislation and brief RTID Executive Committee, Legislative Transportation Committee Chairs and WSDOT management if/as necessary.
 3. Resource Consultant, in coordination with involved parties, schedules SME meetings and activities to meet schedule and deliverables.
 4. Limited survey – characteristics of comparable projects to determine “best practices” for cost estimating, control of baseline scope, managing to cost and schedule (utilize Schexnayder report, “Best Practices and Guidelines for Project Cost Estimating” NAS/TRB NCHRP Report, Summer 2003.)
 5. Review of CEVP® & SCoRE methodology developed in 2002 and developed further in 2003 – define areas for more detailed review including base assumptions and process limitations.
 6. Review existing project cost estimates for RTID projects including those evaluated by the CEVP® or SCoRE processes.
 7. Determine if previous cost estimates for RTID projects are sufficient or if updating is required.
 8. Determine actions for RTID projects which have not been estimated or evaluated by CEVP® or SCoRE processes – determine which should be estimated using normal estimating processes and which should have CEVP® or CRA processes applied.
 9. Working with WSDOT, Cities and Towns Project Staffs, obtain new/revised cost estimates including application of CEVP® or CRA process to projects requiring updates or new cost estimates. Such work to be done so as not to impact the independent nature of this task.
 10. Ongoing SME meetings - discussion, definition of issues and concerns, responses to questions, follow-up and resolution of issues, recommendations for additional actions.
 11. Prepare draft and initial findings, conclusions and recommendations – including discussion and debate by SMEs internally and with WSDOT and RTID representatives including comments and suggestions. Submit interim results to WSDOT and RTID to meet the June 30th delivery requirement.
 12. Produce Draft report with findings and recommendations – including response to comments and suggestions – update for release.
 13. Continue review of cost estimates, updates and work on outstanding issues.
 14. Public comments on draft report, findings and recommendations.
 15. Include comments in Final report, deliver to WSDOT and RTID, presentations to various audiences as required.
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SCHEDULE FOR THIS TASK

Note: This is a compressed schedule developed to meet minimum RTID and WSDOT requirements for sufficient data relative to the Legislative intent and to adequately inform WSDOT, RTID and the Legislature in appropriate time for the currently scheduled November 2004 Referendum. This means significant early results are required by June 30, 2004.

RTID Cost Estimate Review - Outline Schedule consistent with RTID Requirements														
#	Work Element	Dec-03	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04	Dec-04
1	Task scope, plan & approach, schedule, budget and procurement													
2	RFQ, Selecton and Negotiation, NTP for Resource Consultant & SMEs								Advance work, early start, alternate meetings....					
4	Confirm task plan, sequence and schedule													
5	Agree task plan and approach													
6	Task Managers & Expert Panel meetings													
7	Survey comparable projects “best estimating practices”													
8	Review of WSDOT CEVP® methodology													
9	Review existing cost estimates for RTID projects													
10	Determine if updated/additional estimates are needed (using CEVP®)													
11	CEVP® or CRA estimates performed													
12	Initial findings, conclusions and recommendations - discussions													
13	Draft report written													
14	Public comments on Draft Report													
15	Include comments in Final Report, Presentations													